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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

November 12, 2002

Ms. Marlene Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW, Room TWB-204  
Washington, DC 20554

Re: Notice of Oral Ex Parte Communication, In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket Nos. 01-338, 96-98 and 98-147

Dear Ms. Dortch:

On Friday, November 8, 2002, Bob Quinn, Mike Pfau, Rich Rubin and the undersigned, all representing AT&T, met with William Maher, Scott Bergmann, Michelle Carey, Rich Lerner, Tom Navin, Robert Tanner, Jeremy Miller and Julie Veach of the Commission's Wireline Competition Bureau. The purpose of the meeting was to discuss the engineering and economic disadvantages that CLECs face in trying to compete in the analog mass-market world using a UNE-L strategy. All comments made at the meeting were consistent with the attached presentation materials.

Consistent with Commission rules, I am filing one electronic copy of this notice and request that you place it in the record of the above-referenced proceedings.

Sincerely,

A handwritten signature in black ink, appearing to be "JM" followed by a horizontal line.

Joan Marsh

cc: William Maher  
Michelle Carey  
Thomas Navin  
Jeremy Miller

Scott Bergmann  
Rich Lerner  
Robert Tanner

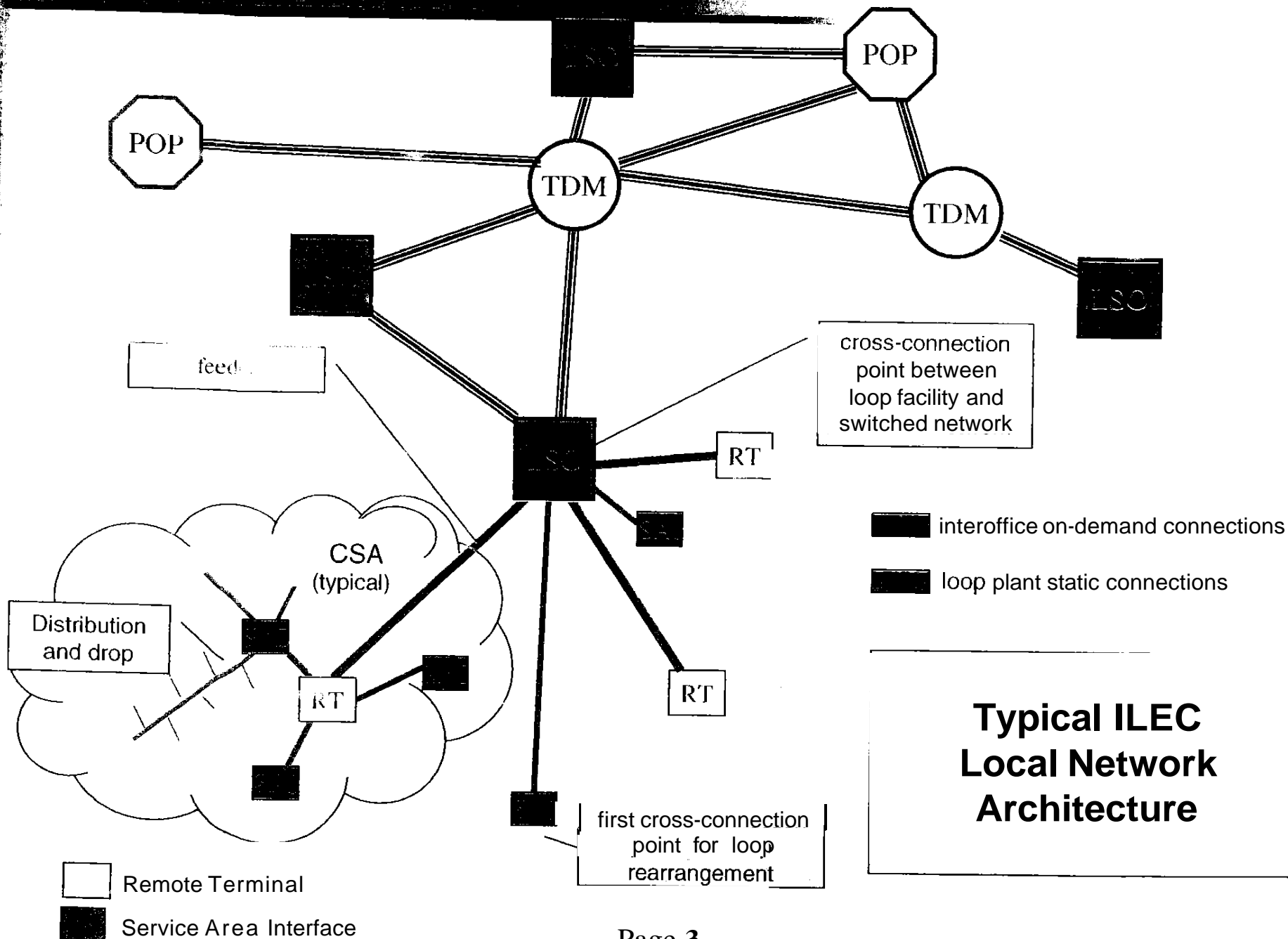
**PROMOTING MASS-MARKET  
COMPETITION:  
FACING THE ANALOG WALL**

AT&T

November 8, 2002

# ***How Do Regulators Create an Environment That Will Encourage Rational Facilities Builds?***

- ***UNDERSTAND ILEC/CLEC NETWORK  
ARCHITECTURE DIFFERENCES***
- ***IDENTIFY AND MINIMIZE CLEC COST  
DISADVANTAGES***
- ***CREATE AN EVEN PLAYING FIELD FOR  
ALL ALL DISTANCE PLAYERS***

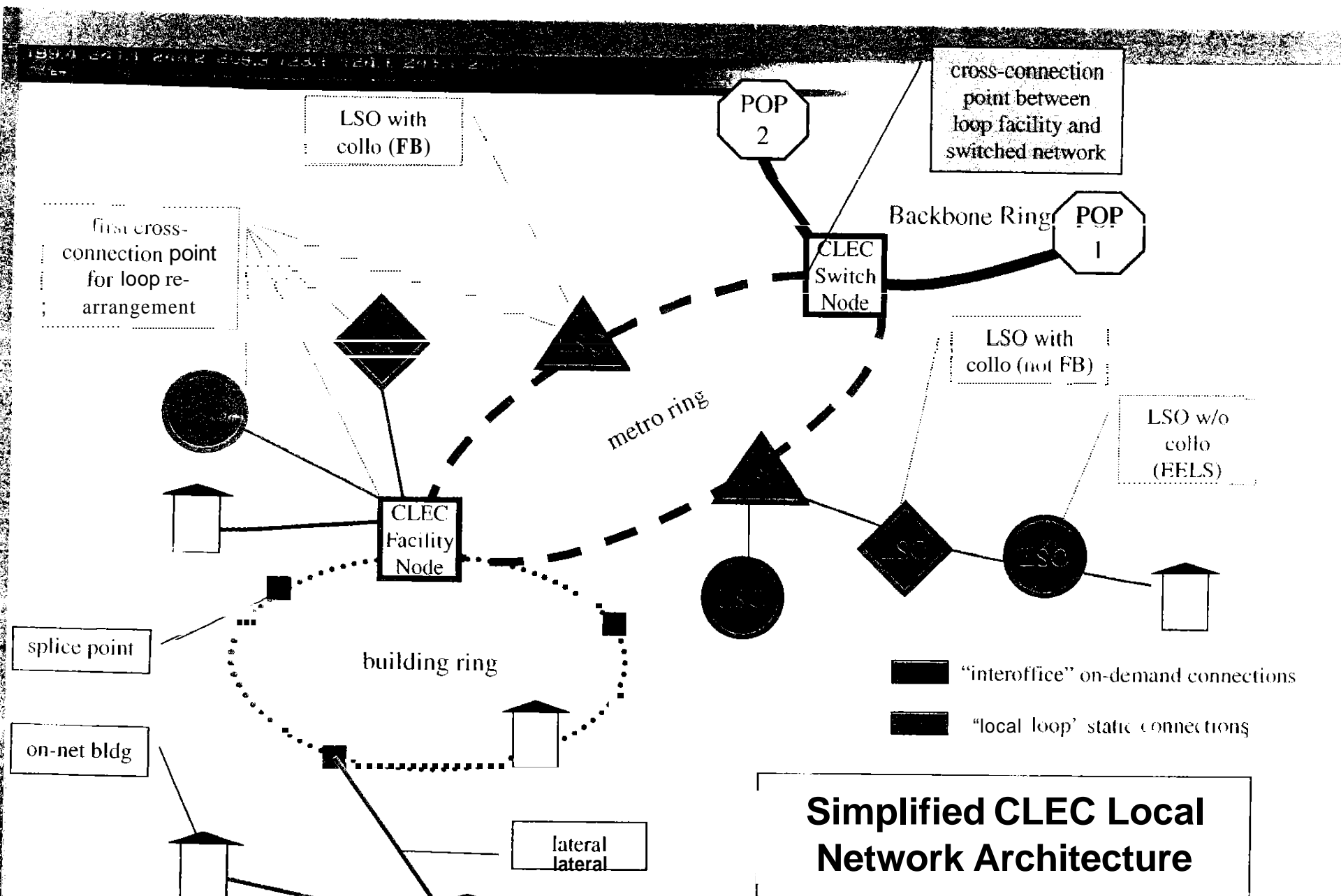


## Typical ILEC Local Network Architecture

# AT&T Network Services

## AT&T Points of Presence





AT&T: 25% of our 1700 collocations are facilities-based

RBOC UNE Fact Book: 13 facilities-based collocations for every 100 wire centers

# ***The Key for all Providers: Connecting the loop to a switched network***

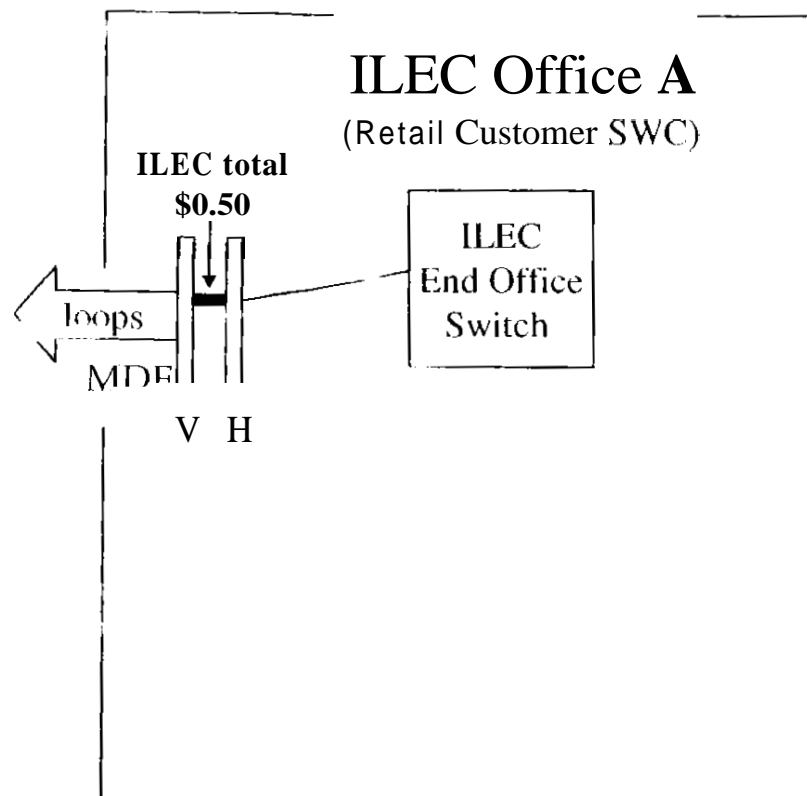
## Key ILEC Costs

- Cross-connection from loop to ILEC switch port with a few feet of jumper cable

## Key CLEC Costs

- Collocation Costs
  - Space; Power; Cross-Connect Devices
- Loop Provisioning Costs
  - Hot Cut charge and internal CLEC costs to support manual processes
- Transmission Equipment
  - DLC; Multiplexer (DS1 to DS3)
- Transport Costs
  - Interoffice Transport or Special Access
- Facilities-Based Connectivity Costs
  - Add/Drop multiplexer (DS3-OC48)
  - Fiber distribution panel
  - Connectivity to metro ring

# ILEC vs. CLEC loop interconnection



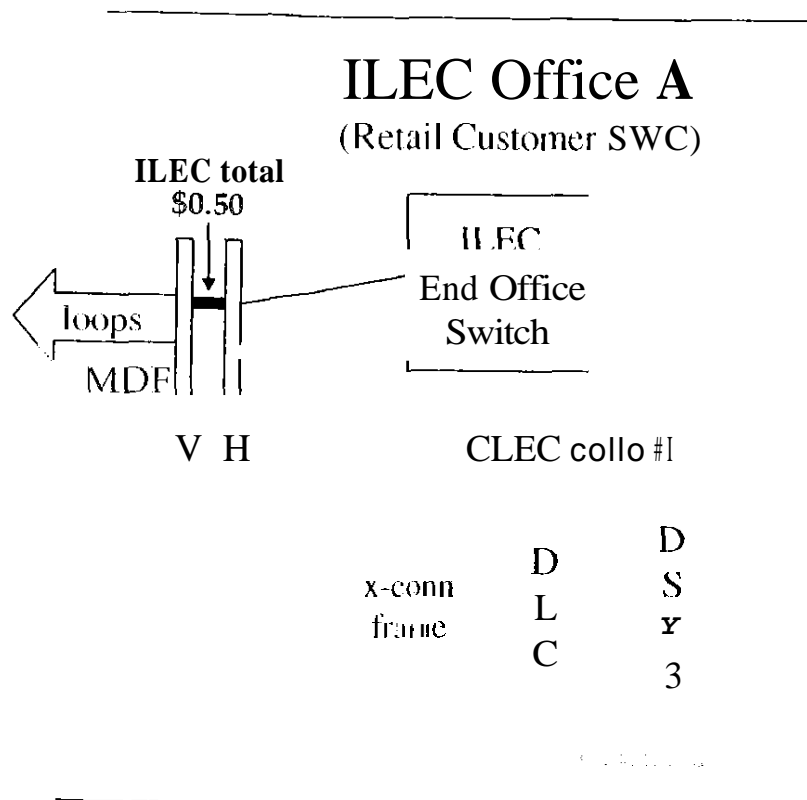
When an ILEC activates service for a retail customer, the customer's loop must be connected to the switch port. Either a short pair of wires is run between the loop and the switch port appearances on the Main Distribution Frame or, if the connection was left in place, a software transaction activates service.

The connection between the loop and the switch functionality for the ILEC is a short copper pair that represents a cost well under 50 cents per month.

■ ILEC Backhaul Network



# ILEC vs. CLEC loop interconnection



When a CLEC attempts to provide voice grade service over a UNE-L, it must invest in an extensive backhaul infrastructure to provide the equivalent of the tie-pair

First, the CLEC must digitize and multiplex every UNE-L to permit transmission of the customer's communications to a distant switching location

This activity, assuming 100% utilization, generates added costs of about \$2.33\* per loop for the DLC functionality plus about about \$1.41\* per loop for collocation space the DLC consumes

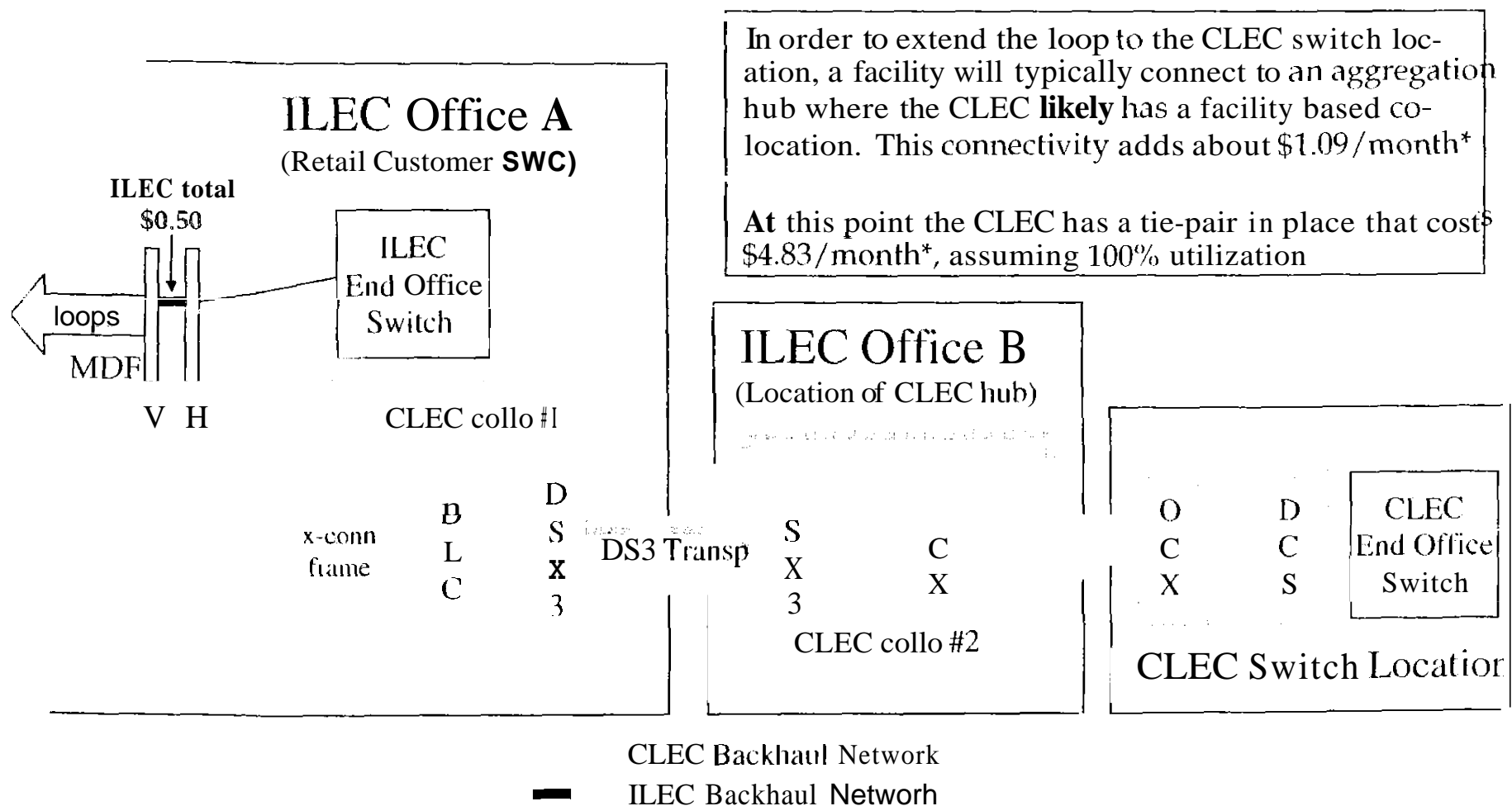
**At this point the loop has yet to be extended to a different location**

■ ILEC Backhaul Network

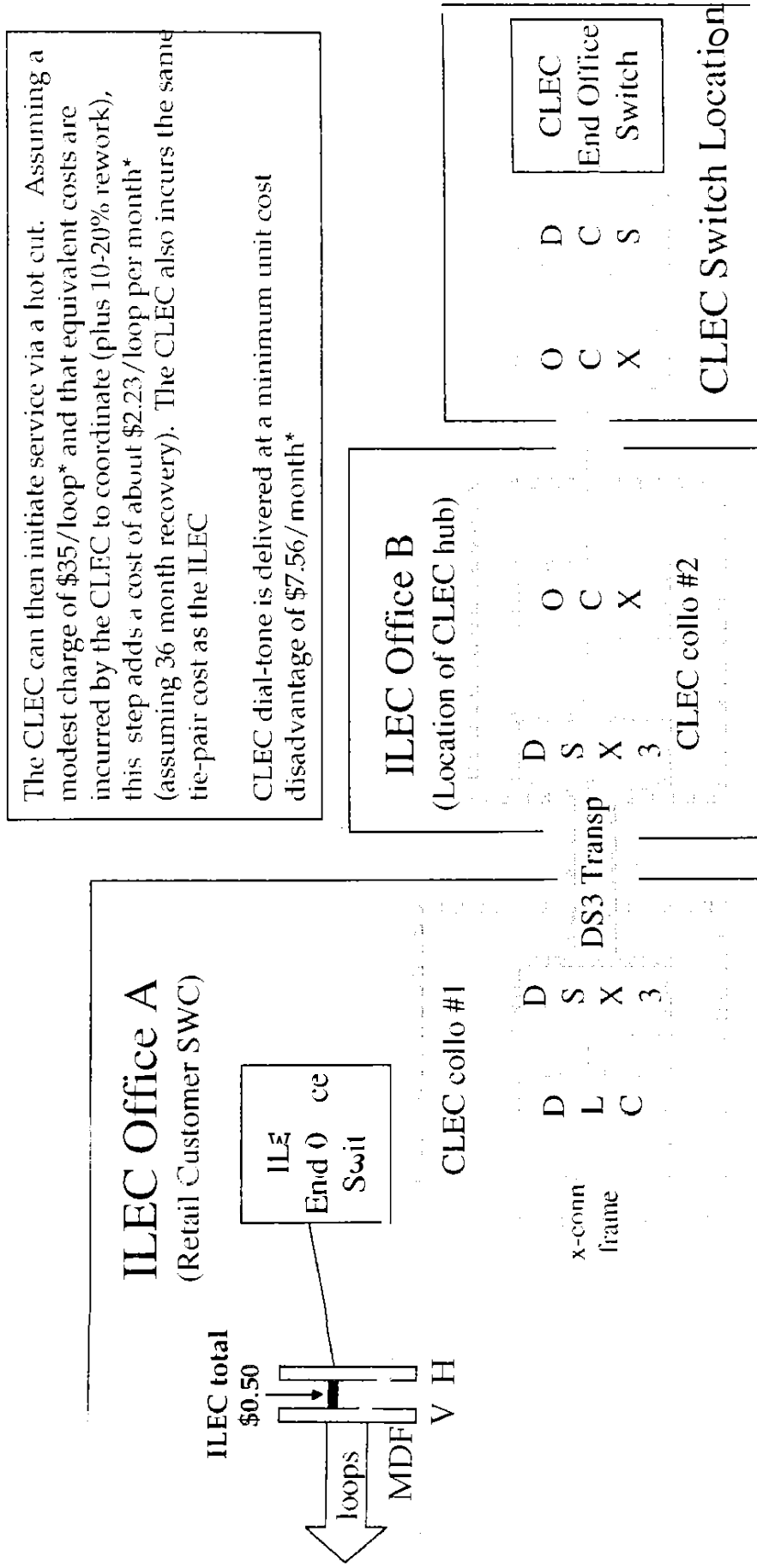
CLEC Backhaul Network

All costs represent conservative estimates of industry costs and are not reflective of AT&T's actual costs

# ILEC vs. CLEC loop interconnection



# ILEC vs. CLEC loop interconnection



The CLEC can then initiate service via a hot cut. Assuming a modest charge of \$35/loop\* and that equivalent costs are incurred by the CLEC to coordinate (plus 10-20% rework), this step adds a cost of about \$2.23/loop per month\* (assuming 36 month recovery). The CLEC also incurs the same tie-pair cost as the ILEC

CLEC dial-tone is delivered at a minimum unit cost disadvantage of \$7.56/month\*

CLEC Backhaul Network  
 ILEC Backhaul Network

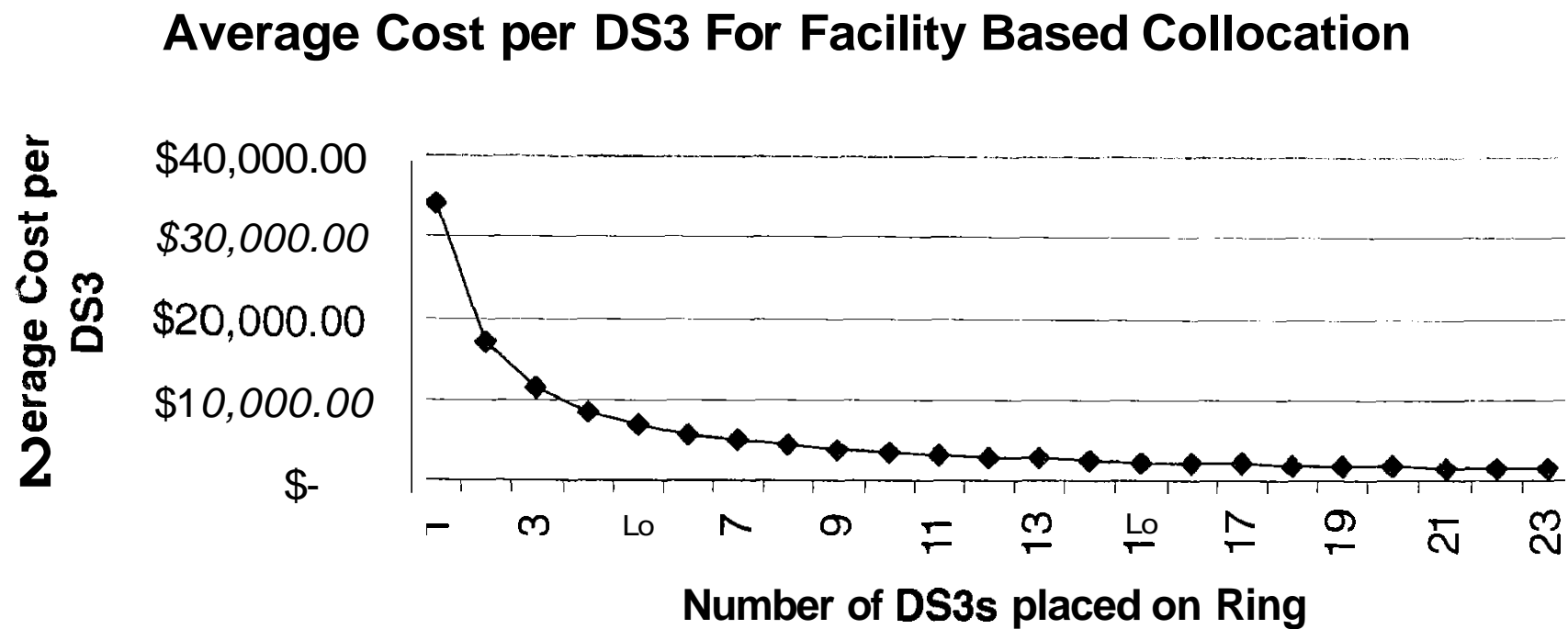
# **ILEC vs. CLEC loop interconnection**

- Recap of Unit Cost Disadvantage for CLECs at 100% Utilization"

- ✓ \$0.50/month Main Frame cross-connection
- ✓ \$2.33/month Loop Digitization (DLC)
- ✓ \$1.41/month Collocation Space
- ✓ \$1.09/month LSO-Switch Connection
- ✓ \$2.23/month Customer Transfer Cost

\$7.56/month "tie-pair" for CLEC versus\*  
\$0.50/month tie-pair for ILEC

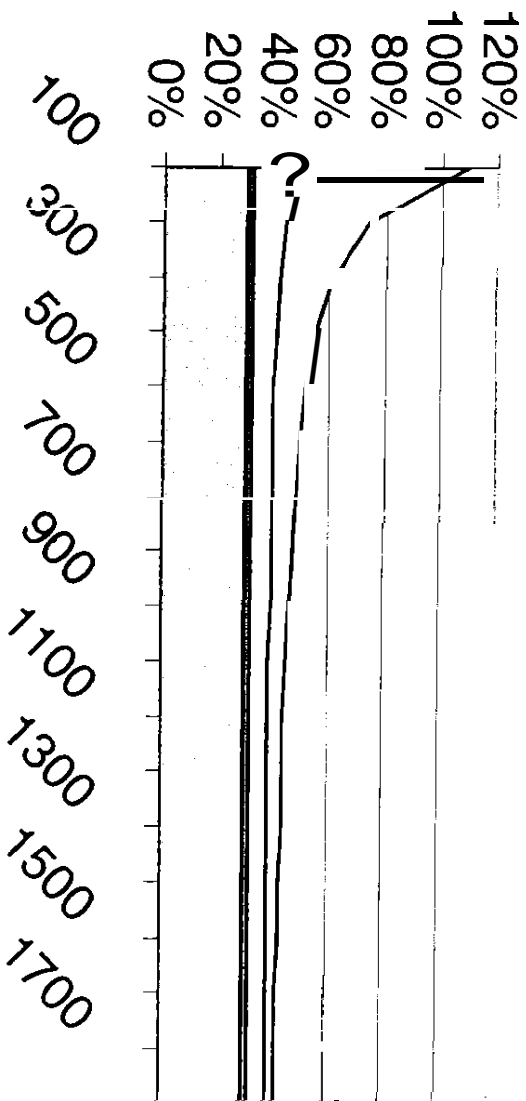
# Capacity Cost at a “Typical” Facility-Based Collocation



# Small Business Backhaul "Disadvantage" Is Sizeable

## Small Business Customer

% of Average Retail  
Revenues  
Appropriated



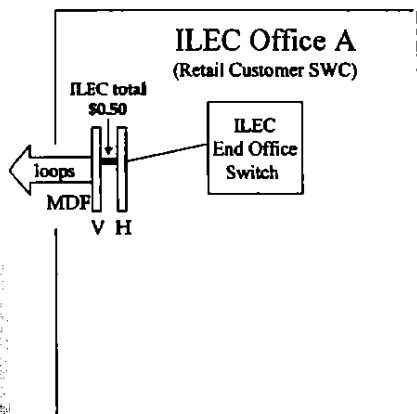
DS0s served from Office

☐ UNE-L ☐ HC ☐ DS0 eqpt ☐ transport

# ***Moving Beyond Local Impairments***

- Electronic Access to the Loop
  - Local and LD PIC processes at parity
  - Support competing platforms for provision of broadband services
  - Breaches the analog wall
- Support efficient aggregation of traffic on local CLEC networks
  - Hubbing is needed to help fill capacity for facility-based collocations
  - Loop, collocation and transport UNEs must be at TELRIC
  - No use/commingling restrictions
- UNE-P is essential to allow CLECs to build a customer base that will support facilities build-out where economically rational
- State PUC Review is Essential

## ILEC vs. CLEC loop interconnection



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— ILEC Backhaul Network

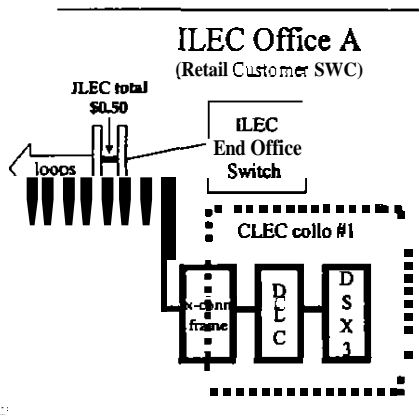
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## COST ESTIMATE INFORMATION:

ALL COSTS REPRESENTED IN THIS PRESENTATION *ARE* CONSERVATIVE ESTIMATES OF AVERAGE INDUSTRY COSTS **AND ARE** NOT REFLECTIVE OF AT&T'S ACTUAL COSTS



## ILEC vs. CLEC loop interconnection



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$$\text{Calculation: DLC investment} = \$277,220 \cdot .2713 \text{ annual cost factor} / 12$$

$$= \$6267.48$$

$$\text{demand capacity} = 672 \cdot 4 = 2,688$$

$$\text{monthly cost} = 6267.48 / 2688 = \$2.33$$

$$\text{Collocation build (investment)} = \$175,000 \cdot .2713 \text{ ACF} / 12 = \$3956.46$$

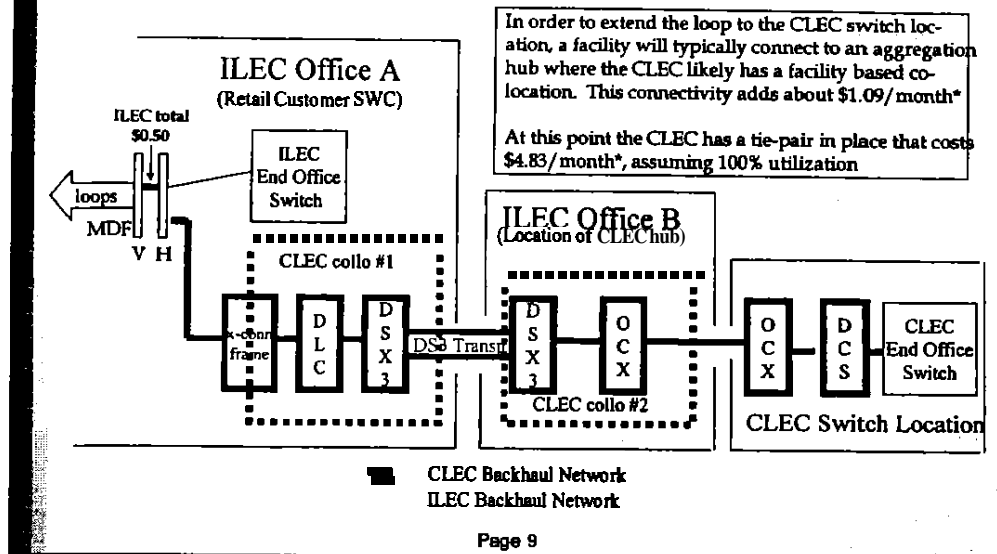
$$\text{Collocation rental (monthly)} = \$3600$$

$$\text{Total effective cost/month} = \$7556.46$$

$$\text{DLC capacity of 100 sq ft} = 8 \text{ modules} \approx 5376 \text{ lines}$$

$$\text{Collo cost per line} = \$7,556.46 / 5376 \text{ lines} = \$1.41/\text{month}$$

## ILEC vs. CLEC loop interconnection



DS3 special access w/o CT at 5 year contract = ~\$1000

Capacity = 2688 VG loops per DS3

Transport to hub =  $\$1000 / 2688 \text{ loops} = \$0.37/\text{month/loop}$

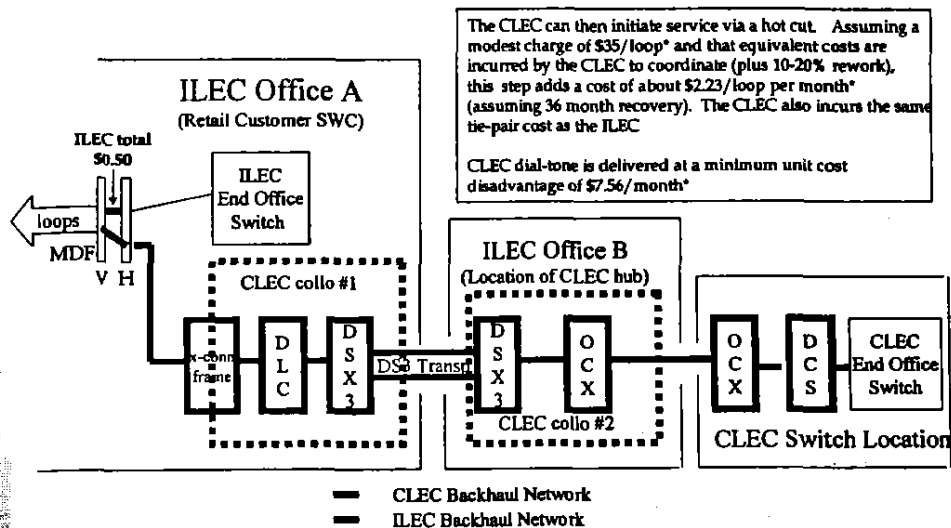
Facility-based collo = \$35,000/month

Utilization = 18 DS3

FB Node cost/DS3 =  $\$35,000 / 18 \text{ DS3} = \$1944/\text{DS3} \cdot 1\text{DS3}/2688 \text{ loops}$   
 = \$0.72/loop /month

Backhaul =  $\$0.37 + \$0.72 = \$1.09$

## ILEC vs. CLEC loop interconnection



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Median Hot Cut charge = \$35.00

Internal Cost = \$35.00

15%rework (\$70\*.15) = \$10.50

average transfer cost/successful transfer = \$80.5

average account life = 36 months

cost/month (without any financing cost) = \$2.23/month

## ILEC vs. CLEC loop interconnection

• Recap of ~~Unit~~ Cost Disadvantage for CLECs at 100% Utilization\*

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